THE CHANGING ROLE OF THE BUSINESS ANALYST IN AN AGILE WORLD

What do we do now?

WHAT WE USED TO DO….

Traditional requirements

TRADITIONAL REQUIREMENTS

- Reams of paper
- Detailed requirements documented upfront
- Documentation of so many requirements that they had to be identified as mandatory or desirable

TRADITIONAL VS. AGILE

- Customers know what they want; can provide specific deliverables.
- Scope creep causes delays, $ overruns or deleted functionality.
- A single “stakeholder”, hands down the product details.
- Fails to recognize the inherent uncertainty and risks in any software development process.
- Limited BA role; basically entails requirements elicitation / documentation only.
- Projects can run ad nauseam

- Elicitation of a much smaller subset of functionality; what can be delivered in a Sprint
- Use of “stories” and use cases to explain
- Use of collaborative methods to understand specs
- Works closely with product owner, SE, QA and PM
- Uses backlog for product features; allows for quick analysis of features that can be implemented in a timeframe.
- Must understand the “enterprise view” of the project

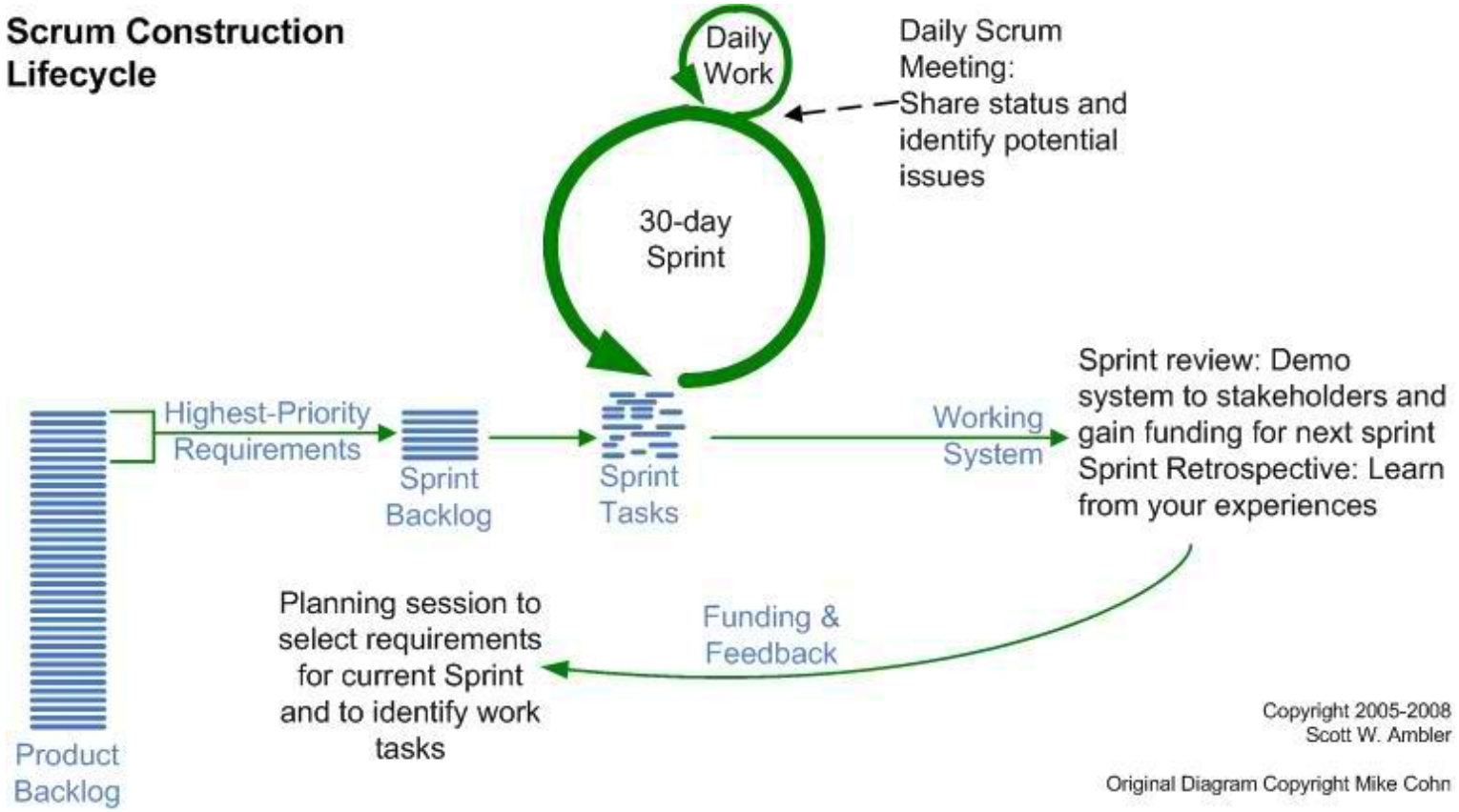
TRADITIONAL REQUIREMENT

- System **shall** provide the capability for a self service portal for a variety of student services.

THE AGILE TEAM OBJECTIVE

- During construction iterations the team incrementally delivers high-quality working software which meets the changing needs of the stakeholders.

AGILE SPRINT LIFE CYCLE



WHAT WE DO NOW…

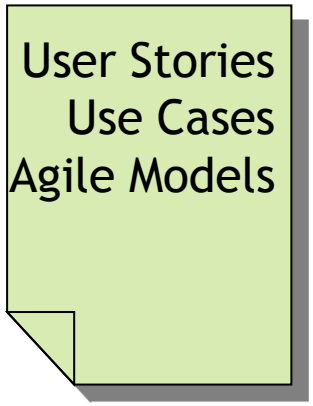
- Initial Requirements Envisioning or Enterprise Analysis
  - Define Stakeholders
  - Define the scope and objectives
  - Define constraints and assumptions
  - Define high level features for the initial project backlog
    - Identify Epics and Themes
  - Provide input into initial conceptual design

MORE OF WHAT WE DO NOW…

- Epic
  - “Provide Student Services”
- Theme
  - Provide on line Student Services

WHAT WE DO NOW…

- Agile Requirements
  - Less detail upfront – details are derived during requirements specification for the target sprint
  - Focus on basic or mandatory requirements – that will allow the team to provide a working result to the customer
  - By providing a faster result the requirements can be fine tuned and mapped better to the customer processes
- Agile Requirement Tools
  - User Stories
  - Use Cases
  - Agile Models



BA TRANSITION

- Executable Requirements Over Static Documentation
- Effectively Implement Requirements, Not Document Them

AGILE "STUDENT SERVICES THEMES"…

- Students can purchase monthly parking passes online.
  - Parking passes can be paid via credit cards.
  - Parking passes can be paid via PayPal ™.
- Professors can input student marks.
- Students can obtain their current seminar schedule.
- Students can order official transcripts.
- Students can only enroll in seminars for which they have prerequisites.
- Transcripts will be available online via a standard browser.

A STORY IS…

"One of the primary development artifacts for Agile project teams"

A "STORY" IS

- Collaborative Effort
  - Stakeholder participation is critical to user story development,
  - Provides enough detail to define what value is to be delivered to the customer
  - Contains just enough information "Just in Time" so that the developers can produce a reasonable estimate of the effort to implement it

A STORY IS NOT….

"Full-blown, traditional, specifications" process

AN AGILE "STORY"…

- Is a high-level description of how the system will behave; a conduit for conversation and is fully fleshed out as it becomes part of each iteration cycle of development

AN AGILE "STORY"…

- Stories are independent of other stories but can be combined in an iteration
- They are typically negotiable; not explicitly detailed but there may be functional or technical restraints that prevent negotiation

AN AGILE "STORY"

- Are small enough for iteration completion
- Are testable and acceptable to the customer
- Redefines definition of done

AN AGILE "STORY"…

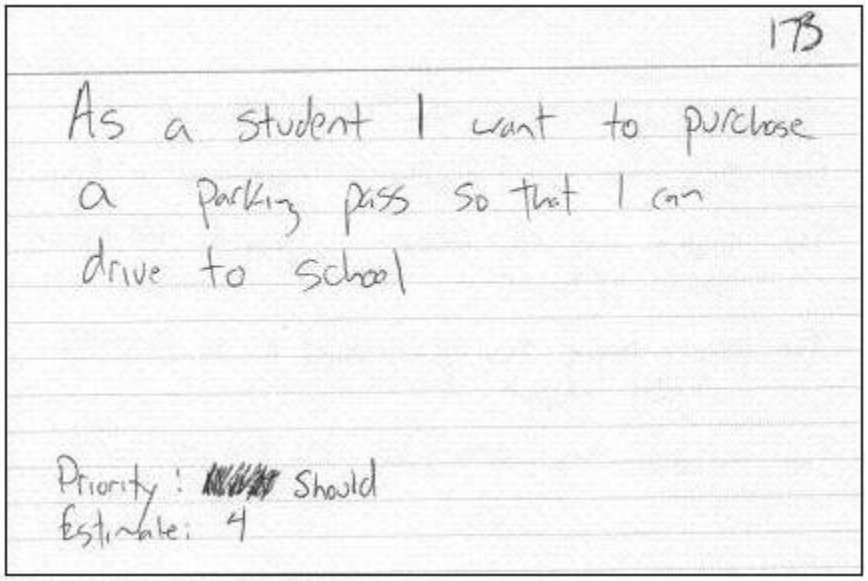
- Contains just enough detailed information so that the developers can produce a reasonable estimate of effort to implement it.
- Shows what value is to be delivered to the customer

TRADITIONAL REQUIREMENT

- System **shall** provide the capability for a self service portal for a variety of student services.

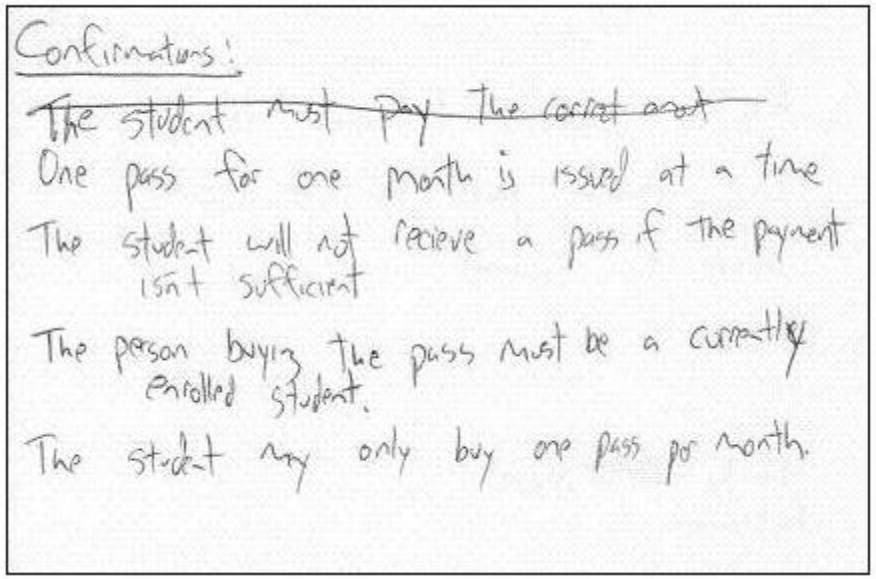
USER STORY CARD

Front of Card



USER STORY DETAILS

Back of Card



AN AGILE USE CASE

- A use case describes how a specific actor will interact with the system to perform a specific action or process.
  - defines a sequence of actions performed by the actor that provides a measurable value for the actor.
  - defines business rules and alternative actions

USE CASE

Pre-Condition: Student has access to Student Services Portal
Action: Purchase Parking Permit
Basic Course of Action:

- •Student inputs her name and student number
- •System verifies the student is an eligible registered student. If not eligible, then the student is informed and use case ends.
- •System displays Parking Permits option (1 months).
- •Student chooses a Parking Permit option
- •System calculates and displays fees
- •Student verifies the cost and either indicates acceptance. If not, the student is informed and use case ends.
- •System acknowledges acceptance and requires form of payment.
- •The student provides a method of payment that can cover the cost. If not, the transaction is canceled, use case ends.

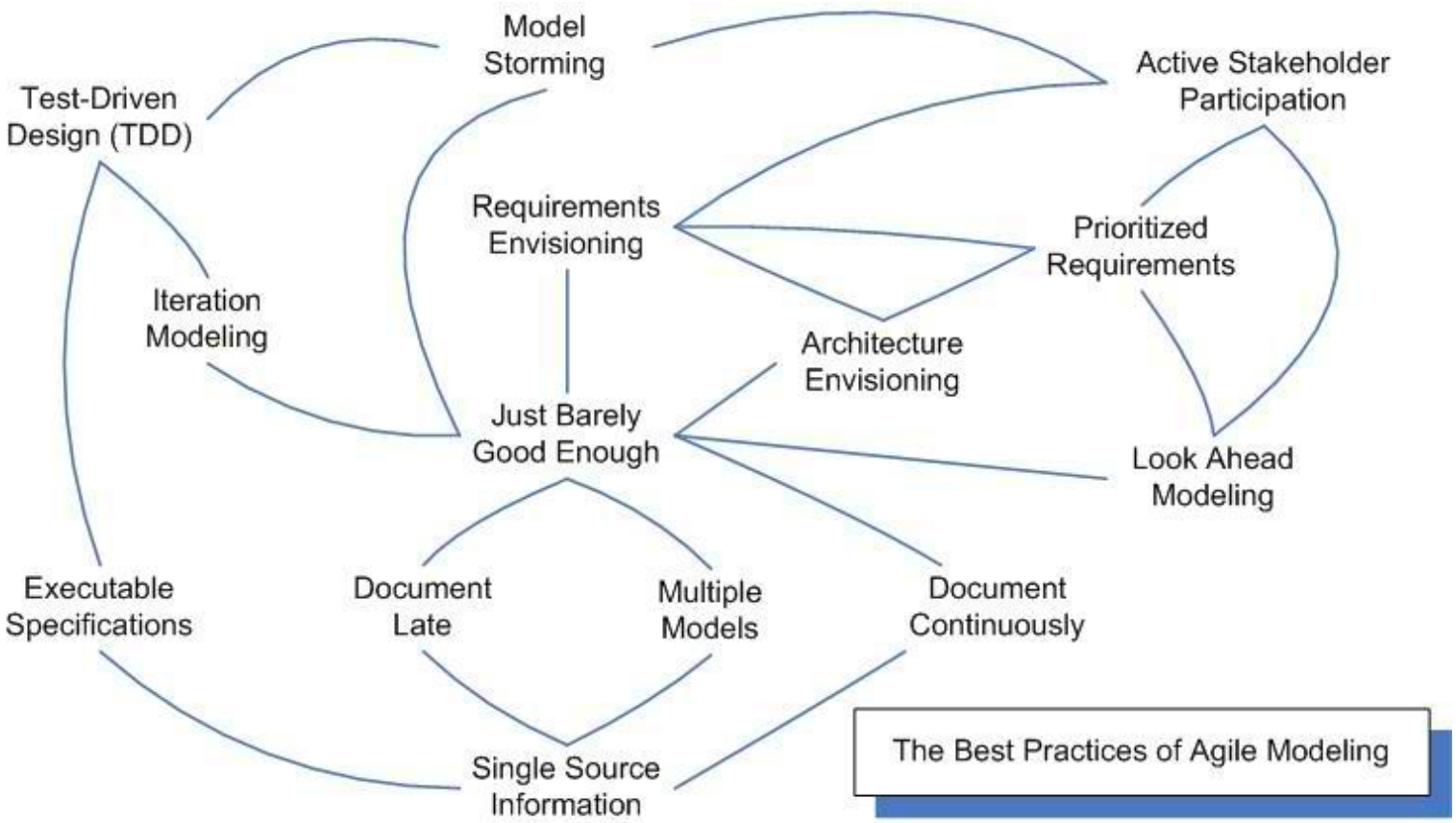
Post Condition:

- •The system prints student parking permit
- •If selected, the system prints student receipt.

AGILE MODELING

- The keys to modeling success are to have effective communication between all project stakeholders
- Active stakeholder participation is critical to the success of modeling efforts because the project stakeholders know what they want and can provide you with the feedback that you require.
- Strive to develop the simplest solution possible that meets all needs
- Obtain feedback regarding your efforts often and early

AGILE MODELING



Copyright 2005-2011 Scott W. Ambler

THE AGILE BA: A TRANSFORMATION

We are now expected to:

- ✓Be an ongoing, integral part of the entire Agile team
- ✓Facilitate and collaborate

BA - Integral part of the Agile team

- The BA is included in each construction iteration to collaborate and assist with the implementation of the requirements
- In many cases, BA may act on be half of the Product Owner

FACILITATE AND COLLABORATE

- **Collaborating closely with both our stakeholders and with Agile team**. We do this to reduce risk through tightening the feedback cycle and by improving communication via closer collaboration.

AN AGILE BA'S WORLD HAS CHANGED

Are you up to the trip?

QUESTIONS?

Carolyn Fairbank, SCM
Energy Enterprise Solutions
505-845-4568

Earlena Giddings, SCM
1 Source Consulting, Inc
505-845-4654

Project Knowledge Team
DOE/NNSA
Albuquerque Complex